

$$\frac{x}{a} + \frac{y}{b} = 1$$

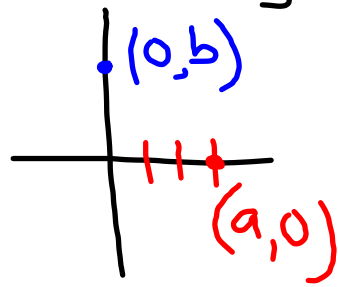
x-int.

$$\frac{x}{5} + \frac{y}{-3} = 1$$

(5, 0)

y-int.

(0, -3)



$$\frac{x}{5} + 0 = 1$$

$$x = 5$$

$$0 + \frac{y}{-3} = 1$$

$$y = -3$$

$$\frac{2x}{-6} + \frac{3y}{-6} = \frac{-6}{-6}$$

$$\frac{x}{\textcircled{-3}} + \frac{y}{\textcircled{-2}} = 1$$

$$2x + 3y = -6$$

$$x\text{-int} \rightarrow -3$$

$$y\text{-int.} \rightarrow -2$$

$$\frac{x}{2} + \frac{y}{3} = 1$$

$$\frac{x}{1} + \frac{y}{4} = 1$$

$$\frac{x}{3} + \frac{y}{2} = 1$$

$$\frac{x}{a} + \frac{y}{5-a} = 1$$

$$ax + (5-a)y = a(5-a)$$

$$\Rightarrow \frac{x}{\textcircled{2}} + \frac{y}{\textcircled{3}} = 1$$

$$\frac{3x}{6} + \frac{2y}{6} = \frac{\textcircled{6}}{6}$$

$$\underline{\underline{3x + 2y = \textcircled{6}}}$$

~~$$3x + 2y = 5$$~~

$$\frac{x}{1} + \frac{y}{4} = 1$$

$$4x + y = \textcircled{4}$$

$$ax + \underline{(5-a)}y = a(5-a)$$

$$\left[\frac{x}{a} + \frac{y}{5-a} = 1 \right] a(5-a)$$

$$(5-a)x + ay = a(5-a)$$

$$ax + (5-a)y = a(5-a)$$

Sum of intercepts is 7.

$$ax + (7-a)y = a(7-a)$$

$$\frac{x}{a} + \frac{y}{(7-a)} = 1$$

$$(7-a)x + ay = a(7-a)$$

$$\frac{x}{7-a} + \frac{y}{a} = 1$$